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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R8-ES-2013-0113]

[4500030113]

RIN 1018-AY80

Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition and Proposed Rule to Remove the Inyo California Towhee (*Pipilo crissalis eremophilus* = *Melospiza crissalis eremophilus*) from the Federal List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of petition finding; proposed rule; notice of availability of a draft post-delisting monitoring plan.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to remove the Inyo California towhee (*Pipilo crissalis eremophilus* = *Melospiza crissalis eremophilus*) from the Federal List of Endangered and Threatened Wildlife due to recovery. This action is based on a review of the best available scientific and commercial information, which indicates that the species is no longer threatened with extinction. This proposed rule, if made final, would also remove the currently designated critical habitat for the Inyo California towhee throughout its range. This document also constitutes our 12-month finding on a petition to remove the Inyo California towhee from the Federal List of Endangered and Threatened Wildlife. We are seeking information and comments from the public on this proposed rule and the post-delisting monitoring plan. The Inyo California towhee occurs only in Inyo County, California.

DATES: The finding announced in this document was made on [INSERT DATE OF FEDERAL REGISTER PUBLICATION]. We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF FEDERAL REGISTER PUBLICATION]. Please note that if you are using the Federal eRulemaking Portal (see **ADDRESSES**), the deadline for submitting an electronic comment is Eastern Standard Time on this date. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by [INSERT DATE 45 DAYS AFTER DATE OF FEDERAL REGISTER PUBLICATION].

ADDRESSES: *Comment submission:* You may submit comments on the proposed rule and the post-delisting monitoring plan by one of the following methods:

(1) *Electronically*: Go to the Federal eRulemaking Portal:

<http://www.regulations.gov>. In the Search box, enter FWS–R8–ES–2013–0113, which is the docket number for this rulemaking. You may submit a comment by clicking on “Comment Now!”

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R8–ES–2013–0113; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

We request that you send comments **only** by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the **Information Requested** section below for more information).

Document availability: A copy of the post-delisting monitoring plan can be viewed at <http://www.regulations.gov> under Docket No. FWS–R8–ES–2013–0113, or at the Ventura Fish and Wildlife Office’s website at <http://www.fws.gov/ventura/>.

FOR FURTHER INFORMATION CONTACT: Stephen P. Henry, Deputy Field Supervisor, Ventura Fish and Wildlife Office (see **ADDRESSES**); by telephone 805–644–1766; or by facsimile (fax) at 805–644–3958. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Purpose of Regulatory Action

In 2011, we received a petition from The Pacific Legal Foundation to remove from the Federal List of Endangered and Threatened Wildlife (delist) the Inyo California towhee based on the analysis and recommendations contained in our 2008 5-year status review of the species (Service 2008, p. 20). In 2012, we published a 90-day finding (77 FR 32922) that concluded that the petition presented substantial scientific or commercial information indicating that the petitioned action may be warranted and initiated a status review. After review of all available scientific and commercial information, we find that delisting the Inyo California towhee is warranted due to recovery and we propose to remove this taxon from the Federal List of Endangered and Threatened Wildlife. This document consists of: (1) A 12-month finding in response to a petition to remove the Inyo California towhee from the Federal List of Endangered and Threatened Wildlife; (2) a proposed rule to delist the Inyo California towhee; and (3) a notice of availability of a draft post-delisting monitoring plan.

Basis for Finding

Under the Endangered Species Act (Act), a species may be determined to be endangered or threatened because of any of five factors: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial,

recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider the same factors in delisting a species. We may delist a species if the best scientific and commercial data indicate the species is neither threatened nor endangered for one or more of the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer threatened or endangered; or (3) the original scientific data used at the time the species was classified were in error.

Threats to the Inyo California towhee at the time of listing included grazing by feral equines, recreational activities (hiking, camping, hunting, and off-highway vehicle (OHV) use), water diversion, and mining. Potential threats identified since listing include energy development, invasive and nonnative plants, predation (including nest parasitism), and climate change. We consider the Inyo California towhee to be recovered because all substantial threats to the towhee have been ameliorated or reduced since listing. All remaining potential threats to the species and its habitat have been determined not to constitute a threat, or are being managed. Our finding is based on the following:

- Data indicate that, since 1998, the total rangewide population of Inyo California towhees has ranged from 640 to 741 individuals, indicating a self-sustaining (productivity equals or exceeds mortality rate) population for the past 13 years that has increased from the estimated population of less than 200 Inyo California towhees at time of listing in 1987 (52 FR 28780 (August 3, 1987)).

- Substantial threats to the Inyo California towhee and its habitat have been or are being addressed such that they have been ameliorated or reduced to the point where the species is not likely to become endangered in the foreseeable future throughout its range.
- The Service has entered into a cooperative management agreement with land managers to show their ongoing commitment to the conservation of the Inyo California towhee and its habitat (Service *et al.* 2010, entire) (see Recovery section for additional details).

Information Requested

We intend that this proposed rule and any final action resulting from it will be based on the best scientific and commercial data available, and be as accurate and as effective as possible. Therefore, we request comments or information from the public, other governmental agencies, Native American tribes, the scientific community, industry, or other interested parties concerning this proposed rule. We particularly seek comments concerning:

- (1) Any threat (or lack thereof) to the Inyo California towhee;
- (2) The range, distribution, and location of any additional populations, and population size of the Inyo California towhee;
- (3) Habitat destruction and/or preservation in relation to the Inyo California towhee;
- (4) Current or planned activities in the towhee's habitat and the possible impacts to the towhee;
- (5) Data on population trends;
- (6) The life history of the Inyo California towhee; and
- (7) Information pertaining to the requirements for post-delisting monitoring of the towhee,

including information on how best to conduct post-delisting monitoring should the proposed delisting lead to a final delisting rule (see *Post-Delisting Monitoring Plan Overview* section below, which briefly outlines the goals of the draft Post-Delisting Monitoring plan (PDM) plan). Such information might include suggestions regarding the draft objectives, monitoring procedures for establishing population and habitat baselines, or for detecting variations from those baselines over the course of at least 5 years.

We will post your entire comment on <http://www.regulations.gov>. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment during normal business hours at the Ventura Fish and Wildlife Office (see **ADDRESSES** section).

Public Hearing

The Act provides for one or more public hearings on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be made in writing and

addressed to the Deputy Field Supervisor (see **FOR FURTHER INFORMATION CONTACT** section above).

Background

Section 4(b)(3)(B) of the Act requires that, for any petition to revise the Federal Lists of Endangered and Threatened Wildlife and Plants that contains substantial scientific or commercial information that reclassifying the species may be warranted, we make a finding within 12 months of the date of receipt of the petition. In this finding, we will determine whether the petitioned action is: (a) Not warranted, (b) warranted, or (c) warranted, but the immediate proposal of a regulation implementing the petitioned action is precluded by other pending proposals to determine whether species are endangered or threatened, and expeditious progress is being made to add or remove qualified species from the Federal Lists of Endangered and Threatened Wildlife and Plants. We must publish these 12-month findings in the **Federal Register**.

Previous Federal Actions

We first classified the Inyo California towhee as a category 1 species in the December 30, 1982, Notice of Review of Candidate Species (47 FR 58454) as a result of habitat loss and degradation. Category 1 candidates were those taxa for which we had substantial information on hand to support the biological appropriateness of proposing to list the species as endangered or threatened. We proposed the towhee for listing as threatened on November 23, 1984 (49 FR

46174); critical habitat was proposed concurrently with the proposed listing. The final listing rule with critical habitat for the towhee was published on August 3, 1987 (52 FR 28780). On the same day the final listing rule for the towhee was published, we published a proposal to designate additional critical habitat (52 FR 28787); however, the designation of this additional critical habitat was never finalized.

We published a notice announcing active review and requested information from the public concerning the status of the Inyo California towhee under section 4(c)(2) of the Act on March 22, 2006 (71 FR 14538). No information regarding the status of the Inyo California towhee was received during the public comment period. In September 2008, we completed the 5-year review of the Inyo California towhee in which we recommended that the Inyo California towhee be removed from the Federal List of Endangered and Threatened Wildlife (Service 2008, p. 20). We notified the public of completion of the 5-year review on March 25, 2009 (74 FR 12878). A copy of the 2008 5-year review for the Inyo California towhee is available on the Service's Environmental Conservation Online System.

(<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B07Q>) and at <http://www.regulations.gov>.

On December 21, 2011, we received a petition dated December 19, 2011, from The Pacific Legal Foundation, requesting the Service to delist the Inyo California towhee based on the analysis and recommendations contained in the 2008 5-year review for the taxon. On June 4, 2012 (77 FR 32922), we published in the **Federal Register** a 90-day finding that stated our

conclusion that the petition presented substantial scientific or commercial information indicating that the petitioned action (delisting the Inyo California towhee) may be warranted.

Species Information

When the Inyo California towhee was listed in 1987, it was classified as the Inyo brown towhee (*Pipilo fuscus eremophilus*), which was one of eight subspecies of what was then considered the brown towhee (*Pipilo fuscus*) (52 FR 28780, August 3, 1987). In 1989, the American Ornithologists' Union (AOU) (p. 536) split the brown towhee into two unique species, the canyon towhee (*Pipilo fuscus*) and the California towhee (*Pipilo crissalis*), dropping the name brown towhee altogether. The Inyo California towhee (*Pipilo crissalis eremophilus*) is classified as a subspecies of the California towhee. More recently, the AOU (2010, p. 727) changed the scientific name of the California towhee to *Melospiza crissalis*, changing the Inyo California towhee scientific name to *Melospiza crissalis eremophilus*. The Inyo California towhee is listed as *Pipilo crissalis eremophilus* on the Federal List of Endangered and Threatened Wildlife (50 CFR 17.11), which we consider equivalent to *Pipilo crissalis eremophilus*. These changes did not alter where or to what individuals protections of the Act apply.

The Inyo California towhee is restricted to the southern Argus Mountains in the Mojave Desert, Inyo County, California (Service 2008, p. 23). The towhee was thought to have been more widespread prior to climate changes at the beginning of the Pliocene Epoch (roughly 5.4–2.4 million years ago) that constrained the subspecies to its current distribution (Davis 1951, pp.

1–120). Because the range of Inyo California towhee has not changed post-Pliocene Epoch, it is considered to currently occupy its entire historical range, though there are indications that individuals have dispersed outside this range in recent years. Within its historical range, the Inyo California towhee occupies dense riparian vegetation and adjacent upland habitats. The riparian habitat, which the towhee relies on for nesting, protection from predators, and shade from the desert sun, is supported by groundwater-fed springs in most cases. However, the amount, quality, and location of habitat is dynamic and varies annually due to its dependence on water and location in the desert. The surrounding upland habitat on adjacent slopes is used extensively for foraging, making these upland areas an important component of the towhee's habitat. The distribution of the Inyo California towhee's range occurs predominantly on Federal lands: 68 percent on Department of Defense (Navy) land within the Naval Air Weapons Station, China Lake (NAWS China Lake); 26 percent on Bureau of Land Management (BLM) land; 5 percent on California Department of Fish and Wildlife (CDFW) land; and less than 1 percent on private property (LaBerteaux and Garlinger 1998, p. 7; LaBerteaux 2004, p. 1; 2008, p. 1; 2011, p. 1; Service 2008, p. 23).

California towhees, including the Inyo California towhee, are omnivorous, feeding on seeds, grain, invertebrates and fruit, with the composition of their diet changing with food availability (Davis 1957, pp. 129–166). Inyo California towhees are year-round residents, and territories, which range from 25 to 62 acres (ac) (10 to 25 hectares (ha)), are defended by both the male and female, which mate for life. The breeding season generally starts in early spring, coinciding with local plant growth and flowering periods. The most frequent clutch size is four eggs, but can range from two to four. Incubation takes about 14 days, and nestlings may fledge

in as little as 8 days after hatching. Fledglings are fed by the adults for at least 4 weeks, and juveniles are independent by about 6 weeks of age, but remain within their natal territory through the subsequent fall and winter. The birds reach sexual maturity in the first breeding season after hatching (LaBerteaux 1989, pp. 42–48). For additional information on range and biology of the Inyo California towhee, see the 2008 5-year status review of the species (Service 2008, entire).

We listed the Inyo California towhee as threatened and designated critical habitat in 1987 (52 FR 28780, August 3, 1987) because of the loss and degradation of the dense riparian habitat the towhee requires. Riparian vegetation is naturally limited in extent in the desert, and destruction of this vegetation from feral animal grazing, recreational activities, water diversion, and mining (specifically from water diversion for mining activities) had significantly degraded and reduced the towhee's already limited habitat.

From 1978 to 1979, towhee populations were estimated to be 72–138 individuals (Cord and Jehl 1979, p. 154). At the time of listing in 1987, we estimated the population to have been fewer than 200 individuals (52 FR 28780). LaBerteaux estimated the minimum population size of the Inyo California towhee in 1994 to be 180 adults based on a combination of her own observations and data from several other researchers (LaBerteaux 1994, p. 6). In 1998, LaBerteaux and Garlinger conducted the first systematic surveys for the Inyo California towhee of what was then considered to be nearly all the potential habitat in the southern Argus Range, including NAWS China Lake, BLM, and CDFW lands. LaBerteaux and Garlinger detected towhees at 210 (81 percent) of the 258 sites (areas of suitable riparian habitat often, but not always, associated with springs) surveyed and estimated the total towhee population to be 640

adults (1998, p. 7). A portion of this increase over 1994 estimates was likely the result of differences in methodology; however, the species was occupying areas not occupied during the earlier surveys, and there were a greater number of towhees occupying areas that were included in previous surveys, indicating that an actual increase had occurred.

In 2004, LaBerteaux conducted systematic surveys of 93 sites located on BLM and CDFW lands (31 percent of the towhee's range) and detected towhees at 70 (75 percent) of the sites (LaBerteaux 2004, p. 11). LaBerteaux (2004, pp. ii, 57) estimated the BLM and CDFW population had increased 13.6 percent at those sites that were surveyed in both 1998 and 2004. Extrapolating the results to the 69 percent of the range not included in the survey, LaBerteaux estimated the rangewide population to be 725 adults (LaBerteaux 2004, pp. ii, 60).

In 2007, LaBerteaux (2008, entire) conducted systematic surveys of 185 sites on NAWS China Lake land (68 percent of the towhee's range) and detected towhees at 140 (76 percent) of the sites (LaBerteaux 2008, p. 10). LaBerteaux (2008, pp. iii, 11) estimated the NAWS China Lake population had increased by 2.8 percent for those sites that were surveyed in both 1998 and 2007. Based on the results of the 2007 surveys, in combination with the 2004 surveys on BLM and CDFW lands, LaBerteaux (2008, pp. iii, 85) estimated the Inyo California towhee population to be 706 to 741 adults rangewide.

In 2011, LaBerteaux (2011, entire) conducted systematic surveys of 93 sites on BLM and CDFW lands and detected towhees at 74 (80 percent) (LaBerteaux 2011, p. 12). This represents a population increase of 6.3 percent for those sites that were surveyed in both 2004 and 2011

(LaBerteaux 2011, pp. ii, 12, 63). Based on the results of the 2011 surveys (227 individuals; LaBerteaux 2011, pp. ii, 12), and in combination with the 2007 surveys on NAWS China Lake (502 individuals; LaBerteaux 2008, p. 10), the total range-wide population is estimated to be 729 adults.

Based on the results of the four systematic surveys conducted over the 13-year period from 1998 to 2011, the estimated total range-wide population of the towhee has ranged between 640 and 741 individuals (LaBerteaux 2011, p. 66). Though the total range-wide population has fluctuated, the survey results show that abundance has increased at previously surveyed sites, towhees are occupying new areas in their historical range in the Argus Range, and there has been as much as a four-fold increase in towhee abundance since the time of listing when the population was less than 200 individuals. Furthermore, the results of these surveys indicate there are stable to increasing population numbers and that the population is self-sustaining, which is likely a positive response to those conservation actions implemented by the NAWS China Lake, BLM, and CDFW. Finally, indications of potential range expansion, outside of the Argus Range, have been noted with observations of single birds in the Panamint Range. Although portions of the Coso Range (west of the Argus Range) and the Panamint Range (east of the Argus Range) have been included in surveys since 1998, no towhees were detected in these areas (LaBerteaux, and Garlinger 1998, p. 7; LaBerteaux 2011, pp. ii, 12, 19, 64). However, in April 2012, two towhees were observed in Surprise Canyon in the Panamint Range, which is roughly 20 miles (mi) (32 kilometers (km)) east of the Argus Range (Ellis 2012b, *in litt.*). While information on the species expanding outside the Argus Range is preliminary, these observations could indicate that current populations in the Argus Range may in some years be producing more

individuals than the habitat can support (than there are territories available) with excess individuals dispersing to other areas with potentially suitable habitat. It is a possible indication of resilient populations with positive demographic trends where productivity is equal to or exceeds mortality.

Recovery

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include: “Objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of [section 4 of the Act], that the species be removed from the list.” However, revisions to the list (adding, removing, or reclassifying a species) must reflect determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is endangered or threatened (or not) because of one or more of five threat factors. Section 4(b) of the Act requires that the determination be made “solely on the basis of the best scientific and commercial data available.” Therefore, recovery criteria should help indicate when a species is no longer an endangered species or threatened species because of any of the five statutory factors.

Thus, while recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are not regulatory documents and cannot

substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of or remove a species from the Federal List of Endangered and Threatened Wildlife (50 CFR 17.11) is ultimately based on an analysis of the best scientific and commercial data then available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

The following discussion provides a brief review of recovery planning and implementation for the Inyo California towhee, as well as an analysis of the recovery criteria and goals as they relate to evaluating the status of the taxon.

The Recovery Plan for the Inyo California Towhee (Recovery Plan; Service 1998) included criteria for delisting the species. The Recovery Plan described, in part, the need for the establishment of a population of at least 400 individuals for a 5-year period (Service 1998, pp. iii, 14). This population goal, based on the best available information at the time, was estimated to be the carrying capacity of the towhee's habitat and represented a reproductively self-sustaining population (Service 1998, p. 14). In addition, the delisting criteria stated that threats to the species' habitat must be reduced and managed, and degraded habitat must be restored and maintained (Service 1998, p. iii). The recovery strategy focused on monitoring the population; managing, reducing, or eliminating threats to the habitat; and rehabilitating destroyed or degraded habitat.

The Recovery Plan identified reduction of threats to the towhee's limited riparian habitat

as critical to its recovery (Service 1998, pp. 15–18). The most serious threats to the towhee's riparian habitat were grazing by feral equines, recreational activities, and water diversion; however, these threats have now all been reduced. Since 1980, Navy- and BLM-funded round-ups have removed more than 9,400 feral equines (5,884 burros (*Equus asinus*) and 3,539 horses (*Equus caballus*)) from the region where the towhee occurs (Easley 2012, *in litt.*). In addition, both the BLM and NAWS China Lake have installed and are maintaining fencing around some affected springs occupied by towhees to limit grazing by feral equines (LaBerteaux 2011, p. 65; Campbell 2012, *in litt.*; Ellis 2012a, *in litt.*, 2013a, *in litt.*). Habitat degradation from recreation has also been reduced in many riparian areas by fencing installed to protect habitat from feral grazers (Service 2008, pp. 12–13). Also, since 1998, the number of springs where water diversion was occurring has been reduced from six to four sites, or by about 33 percent (LaBerteaux and Garlinger 1998, p. 80; LaBerteaux 2008, Appendix C, Record No. 229, 230; LaBerteaux 2011, p. 15; Ellis pers. comm. 2012). For a more detailed discussion of threats to the towhee and measures taken to reduce those threats, see below under Summary of Factors.

The efforts by the BLM and NAWS China Lake to protect, improve, and expand the towhee's riparian habitat corresponded with as much as a four-fold increase in towhee abundance since the time of listing. From 1978 to 1979, towhee populations were estimated to be 72–138 individuals (Cord and Jehl 1979, p. 154). At the time of listing in 1987, the population was estimated to have been fewer than 200 individuals (52 FR 28780). Based on the results of subsequent surveys (see Background section for details), LaBerteaux (2011, p. 66) estimates the towhee population ranged from 640 to 741 adults over the 13-year period from 1998 through 2011. At the time the recovery plan was prepared, we considered that a

population of 400 adults represented a self-sustaining population based on carrying capacity of the habitat. Based on current population estimates (640 to 741) and surveys (as detailed in the Background section), the carrying capacity of available towhee habitat is considered to be greater than that estimated at the time of the recovery plan. Given the stable-to-increasing population numbers over the last 13 years (and possible range expansions), the recovery goal of achieving a self-sustaining population has been achieved.

The continuation of currently implemented conservation measures will be important for maintaining the Inyo California towhee's recovery. In 2010, the Service entered into a cooperative management agreement with the NAWS China Lake, BLM, and CDFW for the ongoing conservation of the Inyo California towhee (Service *et al.* 2010, entire). Although not a regulatory document and subject to funding availability, this agreement includes a commitment by all signatories to continue implementing conservation measures for the towhee regardless of a change in its Federal and/or State status. The agreement is in effect until terminated by one of the parties, which requires written notification that termination is being considered and a meeting by all parties to attempt to resolve concerns. Conservation measures in the agreement include: the ongoing removal of feral equines; protection of riparian areas by fencing when necessary; maintaining existing fencing; regulating recreational use; monitoring and controlling or eliminating nonnative plants; and conducting periodic surveys of towhee abundance, habitat condition, and threats. These conservation measures mirror those described in the Recovery Plan, and are intended to protect, restore, and conserve the towhee's habitat. The agreement also includes a provision that it will be reviewed by all the agencies every 5 years to ensure that it is up to date, that conservation measures continue to be effective, and that any new threats to the

towhee or its habitat are being addressed. Conservation measures that have been carried out since the agreement was signed in 2010 include the removal of additional feral equines from the towhee's range, inspections and repairs of fencing around springs, and surveys of towhee abundance, habitat, and threats on BLM and State lands.

Summary of Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. "Species" is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct vertebrate population segment of any species of fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). A species may be determined to be an endangered or threatened species because of any one or a combination of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or humanmade factors affecting its continued existence. A species may be reclassified on the same basis. We may delist a species according to 50 CFR 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for the following reasons: (1) the species is extinct; (2) the species has recovered and is no longer endangered or threatened (as is the case with the Inyo California towhee); and/or (3) the original scientific data used at the time the species was classified were in error.

A recovered species is one that no longer meets the Act's definition of threatened or endangered. Determining whether a species is recovered requires consideration of the same five categories of threats specified in section 4(a)(1) of the Act. For species that are already listed as threatened or endangered, this analysis of threats is an evaluation of both the threats currently facing the species and the threats that are reasonably likely to affect the species in the foreseeable future following the delisting or downlisting and the removal or reduction of the Act's protections.

A species is an "endangered species" for purposes of the Act if it is in danger of extinction throughout all or a "significant portion of its range" (section 3(6) of the Act) and is a "threatened species" if it is likely to become an endangered species within the foreseeable future throughout all or a "significant portion of its range" (section 3(20) of the Act). The Act does not define the term "foreseeable future." For the purposes of this rule, we define the "foreseeable future" to be the extent to which, given the amount and substance of available data, we can anticipate events or effects, or reliably extrapolate threat trends, such that reliable predictions can be made concerning the future as it relates to the status of the Inyo California towhee. Specifically, for the Inyo California towhee, we consider two factors: the management of threats and the response of the species to management. First, the threats to the species have been successfully ameliorated, largely due to management plans that are currently in place and expected to stay in place, and that are expected to successfully continue to control potential threats (BLM 1999, entire; BLM 2001, entire; BLM 2005, entire; NAWS China Lake 2000, entire; NAWS China Lake 2001, entire). Management plans that consider natural resources are

required by law for all Federal lands on which the Inyo California towhee occurs, which encompass almost 95 percent of the species' range. Management plans are required to be in effect at all times (in other words, if the revision does not occur, the previous plan remains in effect) and to be in compliance with various Federal regulations. Those plans can be amended to update information or change management direction. The Regional Plans covering the range of the towhee were amended in the mid-2000's, after approximately 25 years of implementation. We anticipate the existing plans will be implemented approximately another 25 years before being amended again. Further, all Federal and State landowners have signed the cooperative management agreement to provide protection for the species (Service *et al.* 2010, entire). We anticipate that this cooperative management agreement will be considered in any future land management plan amendments completed by BLM. Second, the Inyo California towhee has demonstrated a quick positive response to management over the past 25 years since the species was listed; based on this, we anticipate being able to detect a species' response to any changes in the management that may occur because of a plan amendment. Therefore, in consideration of the Inyo California towhees' positive response to management, and the expectation that the next revision of the management plans will address continued management that benefits the towhee, we define the foreseeable future for the Inyo California towhee to be the remaining lifespan of the BLM's Regional Management Plans (last updated in 2001 and 2005, 15 years remaining) and that of the next revision (25 years), for a total of 40 years. The word "range" in the significant portion of its range (SPR) phrase refers to the range in which the species currently exists. For the purposes of this analysis, we will evaluate whether the currently listed species, the Inyo California towhee, should be considered threatened or endangered. Then we will consider whether any portions of Inyo California towhee's range are in danger of extinction or likely to

become endangered within the foreseeable future.

The following analysis examines all five factors currently affecting, or that are likely to affect, the Inyo California towhee within the foreseeable future.

A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

Under Factor A in the final listing rule (52 FR 28780), we stated that threats to the Inyo California towhee and its habitat included grazing by feral equines, recreational activities, water diversion, and mining. Since listing, nonnative and invasive plants and climate change have also been identified as potential threats (LaBerteaux 2008, pp. 80, 83, 85; Service 2008, pp. 10, 12–13; LaBerteaux 2011, p. 67). We did not identify climate change as a potential threat to the Inyo California towhee in our 2008 5-year review. However, since that time, we have assessed new information about climate changes (See Climate Change, below). LaBerteaux (2011, p. 67) also identified energy development as a potential new threat to the towhee; however, there are no existing energy projects within the range of the Inyo California towhee, and the best available information does not indicate that any proposed energy development projects are in its range. Therefore, we do not consider energy development to be a threat to the Inyo California towhee. Additionally, we identified fire and flood as threats to the towhee and its habitat in the 2008 5-year review (Service 2008, pp. 10, 18–19). All of the above-mentioned impacts can potentially affect the towhee through degradation, fragmentation, and destruction of its habitat, as further discussed below.

Feral Equines

One of the most serious threats to the Inyo California towhee at the time of listing was loss or degradation of habitat, which was partly due to feral equines (52 FR 28780). According to Cord and Jehl (1979, pp. 79–118) and Laabs *et al.* (1992, Table 2), most springs that supported Inyo California towhees or riparian vegetation were degraded by feral burro use and/or human activities (mining, for example, discussed below). At the time of listing, grazing was widespread throughout the towhee’s range and had substantially reduced the ability of these habitats to support towhees. Grazing by feral equines damages and destroys habitat through trampling and browsing of the vegetation (52 FR 28780). Feral burros are destructive to towhee habitat due to their practice of taking dust baths by rolling and rubbing themselves on the ground. Up to 10 feet (3 meters) in diameter, these “burro baths” destroy vegetation and create miniature dust bowls (Cord and Jehl 1979, pp. 79–118).

The threat of grazing has been reduced by the NAWS China Lake and BLM through the reduction in the number of feral equines within the range of the Inyo California towhee. For example, in the early 1980s as many as 7,000 feral equines were estimated to occur on NAWS China Lake (NAWS China Lake 2011, pp. i, 35). Since 1980, roundups funded by the NAWS China Lake and BLM have resulted in the removal of more than 9,400 feral equines (5,884 feral burros and 3,539 feral horses) from the region where the towhee occurs (Easley 2012, *in litt.*). This has reduced the feral equine population on NAWS China Lake to 682 feral equines, a reduction of about 90 percent of the number in the early 1980s (NAWS China Lake 2011, pp. i, 35). The BLM and NAWS China Lake have committed through a cooperative management

agreement with the Service to continue working together to remove feral equines from the Argus Range, with the goal of eliminating feral burros (Service *et al.* 2010, pp. 5, 7). Based on the results of their 1998 rangewide survey, LaBerteaux and Garlinger identified 12 springs as critically in need of fencing to protect them from feral equines (1998, pp. 66–79, 91). To date, NAWS China Lake and BLM have fenced a total of 17 springs and are committed to fencing additional areas if high levels of impacts by feral equines occur (Service *et al.* 2010, entire).

Although vandals and erosion occasionally compromise the integrity of fencing, the BLM periodically monitors the condition of fences and makes repairs when necessary (Ellis 2006, pers. comm.; Ellis 2013a, *in litt.*). For example, in 2011, the BLM (Ellis 2012a, *in litt.*) repaired fencing at Christmas Spring after LaBerteaux (2011, p. 65) alerted them that feral equines were accessing the water source (LaBerteaux 2011, p. 65). NAWS China Lake has repaired, expanded, or installed fencing at several springs; however, monitoring occurs infrequently and as time allows (Campbell 2012, *in litt.*). These actions are sufficient to maintain the improved status of the habitat, and both BLM and NAWS China Lake have committed to continue actions that control threats in the cooperative management agreement (Service *et al.* 2010, entire).

Since 1998, surveys have been conducted to evaluate impacts of feral equines on the habitat around springs where towhees occur (referred to as “water source surveys”). Towhee habitat on BLM and CDFW lands was surveyed in 1998 (LaBerteaux and Garlinger 1998, pp. 5–6, 65–80, Appendix C), 2004 (LaBerteaux 2004, pp. 8–10, 41–51), and 2011 (LaBerteaux 2011, pp. 8–10, 14–16, 51–56, Appendix C), while NAWS China Lake lands were surveyed in 1998 (LaBerteaux and Garlinger 1998, pp. 5–6, 65–80, Appendix C) and 2007 (LaBerteaux 2008, pp.

8–9, 55–71, Appendix C). The data from these surveys show that recovery actions have resulted in improvements in the quality of towhee habitat throughout the species' range. On BLM and CDFW lands, the proportion of sites classified as having moderate to severe impacts from feral equines declined from 69.3 percent in 1998 to 37.4 percent in 2011. On NAWS China Lake lands, the proportion of sites classified as having moderate to severe impacts from feral equines declined from 61.1 percent in 1998 to 46.4 percent in 2007. Based on the best available information, we conclude that the current level of feral equines does not constitute a substantial threat to Inyo California towhee as population numbers have increased.

Management of feral equines is an ongoing challenge, and often funding and space at storage facilities for captured animals are limiting factors; however, the BLM and NAWS China Lake continue to coordinate their efforts and are committed to managing feral equines per the cooperative management agreement (Service *et al.* 2010, entire) and land management plans on both BLM and NAWS China Lake property. For example, the NAWS China Lake has secured funding for feral burro removals in fall 2013, and has repaired and fenced several springs (Campbell 2013, *in litt.*). All Department of Defense installations, including the NAWS China Lake, are required to operate under an Integrated Natural Resources Management Plan (INRMP), which is designed to provide for the conservation and rehabilitation of natural resources on military lands consistent with the use of military installations, per the Sikes Act (16 U.S.C. 670) (Factor D below).

As part of their updated INRMP, NAWS China Lake has developed a Wild Horse and Burro Management Plan that identifies several goals that would benefit the Inyo California

towhee and its habitat. To summarize, these goals include: (1) maintaining the Centennial Horse Herd (the herd in the Centennial Herd Management Area, which occurs adjacent to and overlaps to some degree with the range of the towhee) within a range of 100 to 168 animals, (2) achieving and maintaining a zero burro population, and (3) reducing the horse herd to minimize damage to water resources, riparian areas, and uplands, which would promote the recovery of native plant and animal populations (NAWS China Lake 2011, pp. i, 36). Overall, the numbers of feral equines have been reduced on the NAWS China Lake by about 90 percent (NAWS China Lake, pp. i, 35). Although some feral equines remain within the range of the towhee, and management of feral equines continues to be an ongoing issue, landowners are managing for them as per the cooperative management agreement. Further, the number of towhees has increased substantially and their habitat quality has improved since listing, primarily as a result of the reduced and managed numbers of feral equines and secondarily due to the management of feral equine access to towhee habitat through fencing. Because the INRMP is a required document of all Department of Defense installations per the Sikes Act (16 U.S.C. 670) with the overarching goal of conserving and rehabilitating natural resources, we anticipate that this or a similar plan that addresses feral equine management will be in place in the future. Therefore, we conclude that the management of feral equines has successfully decreased this threat to towhees, and management of this threat will continue in the future.

Recreational Activities

Recreation (hiking, camping, hunting, and OHV use) may result in loss and degradation of habitat through crushing by vehicles; trampling by hikers, hunters, and campers; cutting for

firewood; and soil compaction. Recreational impacts mainly occur on BLM and CDFW lands, which are open to the public. The NAWS China Lake is closed to most public uses (Pennix 2006, pers. comm.), and surveys of NAWS China Lake lands in 1998 and 2007 found that most sites had negligible or no human-caused impacts (86 and 96 percent of sites, respectively) (LaBerteaux and Garlinger 1998, pp. 66–79; LaBerteaux 2008, pp. 56–64).

As of 2011, recreational impacts mainly occur on BLM and CDFW lands (approximately 31 percent of the species range), but those impacts are limited in scope and severity (approximately 10 percent of sites surveyed had moderate impacts; LaBerteaux 2011, pp. 51–56). Human-caused impacts from recreation on BLM and CDFW lands have remained generally the same from 1998 through 2011 (LaBerteaux and Garlinger 1998, pp. 66–79; LaBerteaux 2011, pp. 51–56). Many of the sites have had little to no human-caused impacts, likely due to remoteness of the sites and lack of access (range, 37–48 percent of all sites), and where impacts do occur, they are at a low level (defined as those sites with slight impact on vegetation, few foot trails, no OHV activity, and no heavily used campsites) in most cases (range, 74–88 percent of affected sites) (LaBerteaux and Garlinger 1998, pp. 66–79; LaBerteaux 2004, pp. 42–46). In 1998, severe human-caused impacts on BLM and CDFW lands occurred at four sites, mainly from heavy OHV use and camping activities (LaBerteaux and Garlinger 1998, pp. 65, 71, 72, 74). However, results from the 2011 survey (LaBerteaux 2011, pp. 51, 53, 54) indicated that recreational impacts at these same four sites were reduced. This reduction was likely due to the fact that three of the four springs had been fenced to exclude feral grazers, which also excluded recreational users.

In 2004, human-caused impacts on BLM and CDFW lands were mostly low to negligible (93 percent of sites), and no springs were considered to be severely affected (LaBerteaux 2004, pp. 42–46, 47). In 2011, severe human impacts occurred at three sites on BLM lands (LaBerteaux 2011, p. 56). However, these sites were all located in the Panamint Range, which is outside the known historical range of the species. No breeding towhees are known to occur in the Panamint Range (LaBerteaux 2011, p. 41), although a few individual towhees have been observed there. Although recreational activities will continue within the range of the towhee, they have been reduced and are expected to remain at very low levels in the future due to ongoing management actions and the existing cooperative management agreement (Service *et al.* 2010, entire). Current levels of recreation are not having a major impact on the towhee as indicated by the increases in the number of towhees and amount and quality of habitat. The current level of recreation is expected to continue or decrease into the future based on management commitments. Therefore, based on the best available information, we conclude that recreational activities do not constitute a substantial threat to the Inyo California towhee now or in the future.

Water Diversion

Although water diversion has the potential to impact towhee breeding habitat, it occurs at only a few springs within the range of the towhee. Water diversion can reduce the amount of water available to maintain healthy riparian vegetation. As described in the Species Information section, towhees rely on riparian vegetation for nesting, protection from predators, and shade from the desert sun; consequently, a reduction in riparian vegetation due to water diversion could

impact their survival and breeding success. Water rights have been appropriated on most springs situated on BLM-administered lands for activities such as livestock grazing and mining (52 FR 28780). In 1998, water diversion was occurring at 6 (2.3 percent) of the 264 sites surveyed for towhees (LaBerteaux and Garlinger 1998, pp. 80, 91–92). In 2007 (NAWS China Lake lands) and 2011 (BLM/State lands), water diversions were occurring at only three (two on BLM lands and one on NAWS China Lake) of the original six sites or about 1.1 percent of the 278 sites surveyed for towhees (LaBerteaux 2011, p. 15). The water diversions occurring at the two sites on BLM land are for small, domestic use, for which the landowners have legal water rights (Ellis pers. comm. 2012), while excess water from the other site is diverted by NAWS China Lake to ponds downslope (Easley 2012, *in litt.*). The NAWS China Lake may also occasionally use spring water for certain activities such as dust abatement during construction or maintenance activities. However, the INRMP includes a commitment to ensure protection of groundwater resources, which is necessary to ensure the long-term population viability of the Inyo California towhee, an objective of the plan (NAWS China Lake 2000, pp. 112, 135).

Despite these water diversions, habitat remains suitable at these sites. Researchers observed towhees with young, or displaying behavior that suggests they have young or a nest nearby at the two BLM sites during surveys in 1992, 1998, and 2004 (LaBerteaux 2011, Appendix C, Record No. 20, 31). Juveniles were also observed at the spring located on NAWS China Lake in 1998 (LaBerteaux 1998, pp. 59, 64). The presence of suitable habitat and observation of towhees indicate that sufficient water remains at these springs to support towhees and their habitat. Further, the number of water diversions at towhee-occupied sites has decreased slightly and represents approximately 1 percent of the sites (associated with water sources)

surveyed in 2007 and 2011 (Service 2013). Despite the ongoing diversions, increases in the overall number of towhees and amount and quality of habitat have occurred, indicating the quantity of water diversion is not sufficient to make habitat unsuitable for the towhee.

Therefore, because of the limited number of springs where water diversions occur and the limited amount of water diverted, we conclude that current levels of water diversion do not pose a substantial threat to the Inyo California towhee now or in the future.

Mining

Mining was considered a threat at the time of listing, but is no longer occurring within the species' range. Mining operations usually require the use of water, and at the time of listing, numerous mining claims on BLM land occurred within the range of the towhee and were often associated with springs (52 FR 28780). Since our 2008 5-year status review, the one mine that remained within the Argus Mountains has been closed, and all mining claims have been relinquished (Ellis 2013b, *in litt.*). Mining was eliminated entirely from the NAWS China Lake in 1943 (52 FR 28780). Because there are no longer any mines or mining claims in Inyo California towhee habitat, we conclude that mining and associated activities, such as water diversion, are not a threat to the Inyo California towhee now or in the future.

Invasive and Nonnative Plants

A potential threat identified subsequent to listing is encroachment of invasive and nonnative plant species (LaBerteaux 2008, p. 80; Service 2008, pp. 10, 12–13). Disturbed areas,

such as those caused by feral grazers, allow for the establishment of nonnative plant species including salt cedar (*Tamarix* spp.) and athel (*Tamarix aphylla*) (collectively referred to as tamarisk). Although a native plant, the invasive carrizo (*Phragmites australis*) may choke out other riparian vegetation and may not be optimal habitat for towhees. While both tamarisk and carrizo continue to occur in towhee habitat, the available information does not establish that they are increasing, and both the BLM and NAWS China Lake have active programs to remove tamarisk from springs (Service *et al.* 2010, pp. 5, 7). On the NAWS China Lake, the proportion of sites with tamarisk increased from 2 percent in 1998 (LaBerteaux and Garlinger 1998, pp. 66–79) to 6 percent in 2007 (LaBerteaux 2008, pp. 56–63), while that for carrizo remained at 10 percent. However, subsequently, personnel at the NAWS China Lake removed tamarisk from several areas (Service *et al.* 2010, entire; Campbell 2012, *in litt.*) and have indicated their commitment in the cooperative management agreement to removing tamarisk from towhee habitat in the future (Service *et al.* 2010, p. 7). The proportion of sites with tamarisk on BLM and CDFW lands increased from 4 percent in 1998 (LaBerteaux and Garlinger 1998, pp. 66–79) to 8 percent in 2004 (LaBerteaux 2004, pp. 42–46). However, the BLM has been removing tamarisk from several sites, and, as of 2011, the proportion of sites with tamarisk on BLM and CDFW lands had been reduced to 5 percent (LaBerteaux 2011, pp. 51–56, 65–66). The BLM has also indicated their commitment in the cooperative management agreement to removing tamarisk from towhee habitat in the future (Service *et al.* 2010, p. 5).

Little information exists on the effects of these plant species on the Inyo California towhee. The monitoring reports do not indicate that any towhees have been observed utilizing tamarisk, and there is no information regarding the towhee's ability to establish breeding

territories in riparian habitat dominated by tamarisk (LaBerteaux 2008, p. 83). However, in 2011 an adult towhee was observed feeding its fledglings in carrizo (LaBerteaux 2011, p. 16). Additionally, other species that are adapted to riparian habitat in the southwest, such as the southwestern willow flycatcher (*Empidonax traillii extimus*), have been documented to use tamarisk when nesting and do not appear to suffer from negative physiological effects (Owen *et al.* 2005, entire), reduced survivorship, or productivity (Sogge *et al.* 2006 in Sogge *et al.* 2008; Paxton *et al.* 2007, p. 140). Although we do not know if or how these plant species (carrizo, tamarisk) affect the habitat of the towhee, these invasive and nonnative plants currently comprise only a small portion of the total amount of habitat available to the towhee and there is no indication that these plant species may negatively affect the towhee.

In summary, while these plants occur within towhee habitat, there is no indication that they are spreading to the point of being the dominant vegetation type in these riparian areas or having a negative impact on the towhee, and the BLM and NAWS China Lake are working to control, or in some cases, eliminate them (Service *et al.* 2010, pp. 5, 7). The best available information does not indicate that nonnative and invasive plants are threats to the towhee. Therefore, we do not consider the current abundance and distribution of a nonnative and invasive species in a small portion of the towhee's range a threat to the species now or in the future.

Fires and Floods

We did not identify fires or floods as a threat to the Inyo California towhee in the final listing. However, these natural and manmade disturbances may temporarily reduce the habitat of

the Inyo California towhee in some areas. For example, in 2005 a human-caused fire burned about 10 percent of the towhee habitat on NAWS China Lake, and subsequently was followed by a flash flood that resulted in the additional loss of vegetation and increased erosion (LaBerteaux 2006, entire). However, within one year, LaBerteaux observed the recovery of upland and riparian vegetation and observed towhees in most of the areas impacted by the fire and flood (LaBerteaux 2006, p. 11–14). LaBerteaux (2006, p. 13–14) also observed nonnative plant species such as red brome (*Bromus madritensis*) and cheatgrass (*Bromus tectorum*) in the upland habitat and tamarisk in the riparian habitat.

These natural and manmade events may have had a greater impact on the Inyo California towhee had they occurred at the time when towhee numbers were low and riparian habitat had been reduced and degraded. However, towhees have increased in abundance and now have a wider distribution, and the condition of their habitat has improved, lessening the impact of such events. In addition, prior to the 2005 fire, the Navy updated their wildland fire response to include Inyo California towhee habitat as a protection priority (Pennix 2006, pers. comm.). Presently, we consider these natural and manmade factors to have the potential for short-term (one to two breeding seasons) effects on a few individuals or pairs of towhees in a few localized areas at any one time. If these natural and manmade events were to occur in the future, it is unlikely these events would cause long-term population-level effects (i.e., population declines, extirpation from a site, reduced nesting range, etc.) because these events typically result in temporary, localized impacts and only affect a small portion of the towhee's range at a time. Therefore, we conclude that fire and flood events do not constitute a threat to the Inyo California towhee now or in the future.

Climate Change

Our analysis under the Act includes consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). “Climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007a, p. 78). The term “climate change” thus refers to a change in the mean or variability of one or more measures of climate (temperature or precipitation, for example) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007a, p. 78). Various types of changes in climate can have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007a, pp. 8–14, 18–19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Projecting future climate change still includes a considerable degree of uncertainty, due in part to uncertainties about future emissions of greenhouse gases and to differences among climate models and simulations (Stainforth *et al.* 2005, pp. 403–406; Duffy *et al.* 2006, pp. 873–874), and to the difficulty in predicting change at a local scale. Global climate projections are informative, and, in some cases, the only or the best scientific information available for us to use.

However, projected changes in climate and related impacts can vary substantially across and within different regions of the world (e.g., IPCC 2007a, pp. 8–12). Therefore, we use “downscaled” projections when they are available and have been developed through appropriate scientific procedures, because such projections provide higher resolution information that is more relevant to spatial scales used for analyses of a given species (see Glick *et al.* 2011, pp. 58–61, for a discussion of downscaling). Regional climate change models are available for the area, but lack detail to make meaningful predictions for specific areas such as the range of the Inyo California towhee (Parmesan and Matthews 2005, p. 354).

The Western Regional Climate Center’s California Climate Tracker has developed 11 climate-monitoring regions for California, including a region that includes the western Mojave Desert, where the Inyo California towhee occurs. Data collected from this region indicate that mean, maximum, and minimum temperatures have increased during the last 110 years (Redmond 2008, pp. 36–46). How precipitation in the western Mojave Desert may change is less certain. The IPCC models predict that precipitation will decrease, but the frequency and magnitude of extreme precipitation events will increase. On the other hand, Kelly and Goulden (2008, p. 11824) predict that the amount and duration of precipitation may increase for California (in general).

Based on the information discussed above, temperatures in the western Mojave Desert, where the Inyo California towhee occurs, have increased and are likely to continue increasing. The uncertainty of evaluating the potential impacts of climate change is complicated by the difficulty in predicting how an animal or plant species will respond to climate change. Some

published studies describe how biotic communities may respond to such changes in temperature and precipitation in the near future (Parmesan and Matthews 2005, pp. 333–374; IPCC 2007a, pp. 1–21; IPCC 2007b, pp. 1–22; Jetz *et al.* 2007, pp. 1211–1216; Kelly and Goulden 2008, pp. 11823–11826; Loarie *et al.* 2008, pp. 1–10; Miller *et al.* 2008, pp. 1–17). Climate change can affect plants and animals in a number of ways, including changes in distribution, population size, behavior, and even changes in physiological and physical characteristics (Parmesan and Matthews 2005, p. 373). Depending on the nature and degree of change within the species range, the towhee and its habitat could be negatively affected in several ways. For example, desert birds are anticipated to experience reduced survival during extreme heat waves, which could result in more frequent large mortality events (McKechnie and Wolf 2010, entire). Based on research on other species, higher temperatures could also result in shifts in nesting phenology (timing of egg laying, hatching, fledging, etc., in relationship to climatic conditions) and changes in clutch size (McCarty 2001, pp. 322–323; Both and Visser 2005, pp. 1610–1611).

As discussed in the “Species Information” section, the Inyo California towhee relies on dense, riparian vegetation. Although there is a degree of uncertainty about the effect of climate change on precipitation in the Mojave Desert, a decrease in precipitation could result in a reduction in the areal extent of riparian patches or a reduction of the density of riparian vegetation, or potentially both could occur. In some areas the amount of riparian vegetation could be reduced to the point where it could no longer support towhees. However, none of the models provide information about how climate change might affect the towhee or its habitat directly. For example, we lack the tools to assess how climate change may affect groundwater levels, which feed the springs that support the towhee’s riparian habitat.

Another uncertainty in predicting the potential impact of climate change is the occurrence of periodic droughts, which are a natural feature of the Mojave Desert. The State of California has experienced cycles of drought for many years. For example, between 1928 and 1987, the U.S. Geological Survey (USGS) reported five severe droughts across California, including the longest drought in the State's history during the period 1929–1934 (USGS 2004, p. 2). Increasing temperature could result in more severe and frequent drought, especially in the Southwest (Karl *et al.* 2009, p. 42). However, we are not aware of any formal studies on the direct effect of rising global temperature on drought severity or frequency (Karl *et al.* 2009, p. 5). Drought severity and frequency are a function of a complex series of factors, such as the El-Niño–Southern Oscillation (ENSO) intensity and duration, as well as geographic variations in sea surface temperature, which may also be affected by increasing temperatures (Karl *et al.* 2009, p. 105), thereby compounding the uncertainty associated with precipitation projections (Karl *et al.* 2009, p. 105). Therefore, at this time, we lack sufficient tools to predict how climate change may influence the duration or severity of drought within the range of the Inyo California towhee, or how changes in drought patterns might impact the species.

In summary, predicting the effects of climate change upon the Inyo California towhee is difficult due to the uncertainties of climate projection models, the lack of models for projecting climate change for relatively small geographic areas, and the complexity of interacting factors that may influence vegetation changes. Because we cannot predict how climate may change within the towhee's range, we cannot make meaningful projections on how the towhee may react to climate change or how its habitat may be affected. Therefore, at this time, the best available

information does not suggest that climate change is adversely affecting the Inyo California towhee.

Summary of Factor A

Impacts to the towhee identified under Factor A in the 1987 listing rule (52 FR 28780) have all been reduced. Habitat destruction from feral equines has been substantially reduced through actions taken by the NAWS China Lake and BLM. Although feral equines remain within the range of the towhee, and not all riparian areas occupied by towhees have been fenced, the current level of grazing has not hindered the recovery of the species. Habitat losses from recreation have also been reduced in many riparian areas by fencing installed to protect the habitat from feral grazers. Water diversion has been reduced, and is occurring at only two springs occupied by towhees. There are no active mining operations within the range of the towhee, and all mining claims have been relinquished. No available information suggests that nonnative and invasive plants are affecting the towhee. While these plants occur within towhee habitat, we have no indication that they are spreading to the point of being the dominant vegetation type in these riparian areas, and the BLM and NAWS China Lake are committed to controlling, or in some cases eliminating, them (Service *et al.* 2010, pp. 5, 7). Additionally, as discussed below in Factor D, multiple laws provide protections for the Inyo California towhee and their habitat, including multiple BLM land designations that overlap with portions or the entire range of the Inyo California towhee, that will continue if the species is delisted. These regulations and land designations, and their associated land management plans, have guided many of the activities discussed above that ameliorated these threats. Further, although natural

and manmade events such as fire and floods may occur within the Inyo California towhee range, they are not likely to occur on a scale or frequency to constitute a threat to the species.

Average temperatures have been rising in the western Mojave Desert, and this trend will likely continue because of climate change. Climate change may also affect precipitation and the severity, duration, or periodicity of drought. However, a great deal of uncertainty exists as to the rate at which the average temperature may increase, and the effect of climate change on both precipitation and drought. In addition to the uncertainty associated with how the overall climate of the Mojave Desert may change, the impact of climate change on the Inyo California towhee will depend on a complex array of other factors, including how the species and its habitat respond to climate change. In light of all the factors involved, the best available information does not suggest climate change is adversely impacting the Inyo California towhee now or in the future.

In addition to the progress that has been made to improve and protect the Inyo California towhee's habitat to the point that the towhee can now be delisted, we have entered into a cooperative agreement with the NAWS China Lake, BLM, and CDFW to continue protecting the towhee's habitat after delisting by means of maintaining feral equines at current levels or further reducing their numbers, maintaining existing fences or installing new fencing where necessary, monitoring towhee habitat, and controlling or eliminating nonnative and invasive plants. This agreement has resulted in actions that have decreased threats to the species and supported recovery, and it is also intended to ensure the long-term survival of the towhee following delisting. We do not consider grazing by feral equines, recreational activities, water diversion,

mining, nonnative and invasive plants, or climate change to constitute a substantial threat to the Inyo California towhee now or in the future.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Overutilization for commercial, recreational, scientific, or educational uses was not mentioned as a threat when the Inyo California towhee was listed (52 FR 28780), and the best available information does not indicate such threats exist at the present time. Therefore, based on the best available information, we conclude that overutilization is not a threat to the Inyo California towhee now or in the future.

C. Disease or Predation

Disease or predation was not mentioned as a threat when the Inyo California towhee was listed (52 FR 28780). Subsequent to the listing, LaBerteaux (2011, pp. 13–14) suggested that the nest parasitism by brown-headed cowbirds (*Molothrus ater*) or predation of nestlings by common ravens (*Corvus corax*) may negatively affect nesting success of the Inyo California towhee because both species have been observed to occur in towhee habitat. However, LaBerteaux did not provide any information that would indicate that either brown-headed cowbirds or common ravens are having an impact or are an actual threat to towhees. For example, during surveys in 2011, LaBerteaux (2011, p. 13) documented brown-headed cowbirds at only 1 (1.1 percent) of the 93 sites on BLM and CDFW lands and found no evidence of nest parasitism at any of the sites occupied by towhees. The number of cowbirds within the range of

the towhee is extremely low and does not pose a threat to towhees.

Common ravens are more abundant within the range of the towhee than cowbirds. For example, in 2011 LaBerteaux (2011, p. 14) documented common ravens at 39 sites (41.9 percent) surveyed on BLM and CDFW lands, which was an increase from 13 sites in 2004. Although common ravens have not been observed preying on towhee eggs or nestlings, they have at least once been observed preying on eggs and nestlings of other desert bird species that occur in the area (LaBerteaux and Garlinger 1998, p. 64), from which it may be inferred that they also prey on towhees. However, towhee population numbers have remained stable to increasing over the last 13 years, which indicates that any predation that may be occurring is not at a level sufficient to cause negative population-level effects.

While ravens and brown-headed cowbirds have been documented in towhee habitat, towhee population numbers have remained stable to increasing over the last 13 years. This indicates that while nest parasitism and predation may occur or have the potential to occur, they are not occurring at a level sufficient to cause negative population-level effects (i.e., population declines, extirpation from a site, reduced nesting range, etc.). The best available information does not indicate that predation (including nest parasitism) is a threat to the Inyo California towhee; therefore, we conclude that predation (including nest parasitism) is not a threat to Inyo California towhee now or in the future.

D. The Inadequacy of Existing Regulatory Mechanisms

If this proposal to delist the Inyo California towhee is finalized, the towhee will no longer be protected under the Act. However, other regulatory mechanisms will remain in place after delisting that will continue to help ensure that future impacts will be reduced or minimized, including the protective provisions of: the California Endangered Species Act of 1984 (CESA; California Fish and Game Code, section 2080 *et seq.*), the California Ecological Reserve Act of 1968, the Migratory Bird Treaty Act of 1918 (MBTA; 16 U.S.C. 703–711; 40 Stat. 755), the Sikes Act (16 U.S.C. 670), the Federal Land Policy and Management Act of 1976 (FLPMA; 43 U.S.C. 1701 *et seq.*), the Wilderness Act of 1964 (16 U.S.C. 1131–1136, 78 Stat. 890), and the National Environmental Policy Act of 1970 (NEPA; 42 U.S.C. 4321 *et seq.*). These protections, taken together, provide adequate regulatory mechanisms to prevent the Inyo California towhee from becoming threatened or endangered after it is removed from the Federal List of Endangered and Threatened Wildlife. The cooperative management agreement, while not a regulatory document, memorializes the commitment of the Service, BLM, NAWS China Lake, and CDFW to coordinating and implementing those measures that will result in the long-term conservation of the species.

The Inyo California towhee is listed as endangered under the California Endangered Species Act (CESA), and the removal of the towhee from the Federal List of Endangered and Threatened Wildlife will not automatically result in its removal from the State list. We are not aware of any plans by CDFW to remove the towhee from the State list. CESA prohibits unpermitted possession, purchase, sale, or take of listed species. However, the CESA definition of take does not include harm, which under the Federal Act can include destruction of habitat that actually kills or injures wildlife by significantly impairing essential behavioral patterns (50

CFR 17.3). CESA requires State agencies to consult with CDFW on activities that may affect a State-listed species and mitigate for any adverse impacts to the species. The provisions of CESA protections would apply only on State or private lands, which make up about 5 percent of the species range while the remainder of the range is on Federal land where other regulatory mechanisms apply (see below). Therefore, the protections provided by CESA will not change if the Inyo California towhee is delisted.

The Migratory Bird Treaty Act (MBTA) affords certain regulatory protections to all native migratory bird species, including the prohibition of take, capture, killing, or possession of migratory birds, their eggs, parts, and nests. The MBTA does not protect habitat except where activities would directly kill or injure birds (such as felling a tree with an active nest), and does not provide regulatory procedures for permitting incidental take. Executive Order 13186 (January 10, 2001) was issued to address the responsibilities of Federal agencies to protect migratory birds. This Executive Order directs Federal agencies whose actions have a measurable negative impact on migratory bird populations to develop Memoranda of Understanding (MOU) with the Service to promote the conservation of migratory birds. For example, under the July 31, 2006, MOU between the Service and the Department of Defense, migratory birds will receive certain benefits on military lands by incorporation of migratory bird conservation into their INRMP, including developing and implementing monitoring programs. The MOU also provides for habitat protection on Department of Defense installations, with specific attention to riparian habitats, fire and fuels management, and invasive species management. Like INRMPs, the MOU is subject to budgetary limits; however, it provides an added level of recognition to the importance of conserving migratory birds and their habitats that are not listed under the Act. The

protections of the MBTA and the requirements of the MOU will continue if the Inyo California towhee is delisted.

The continued conservation of the Inyo California towhee on the NAWS China Lake lands will also be enhanced by the provisions of the Sikes Act. The Sikes Act authorizes the Secretary of Defense to develop cooperative plans with the Secretaries of Agriculture and the Interior for natural resources on public lands. The Sikes Act Improvement Act of 1997 requires Department of Defense installations to prepare INRMPs that provide for the conservation and rehabilitation of natural resources on military lands consistent with the use of military installations to ensure the readiness of the Armed Forces. INRMPs incorporate, to the maximum extent practicable, ecosystem management principles and provide the landscape necessary to sustain military land uses. INRMPs are updated every 5 years, and each version must be approved by the Service for compliance with the Sikes Act. While INRMPs are not technically a regulatory mechanism because their implementation is subject to funding availability, they are an added conservation tool for improving and maintaining wildlife populations and habitat on military lands.

The Navy owns approximately 68 percent of the range of the Inyo California towhee. The NAWS China Lake developed an INRMP (NAWS China Lake 2000, pp. 112–113) that clearly defines objectives and guidelines to aid in the recovery of the Inyo California towhee. Specifically, the INRMP's objectives for the Inyo California towhee are to ensure the long-term population viability; continue to resolve baseline, biological data gaps, and continue habitat enhancement efforts; and support recovery plan efforts to establish stable towhee populations or

eventual delisting (NAWS China Lake, pp.112–113). Guidelines for the Inyo California towhee include such actions as: conduct range-wide surveys for towhees, assess activities that could affect riparian habitat within the towhee’s range, enhance springs impacted by horses by fencing areas with a minimum of 3,500 square feet, maintain adjacent upland habitat for towhee foraging and nesting, fund and support research efforts to support towhees, survey potential habitat and riparian habitat that has not been previously surveyed for towhees, and coordinate with BLM and CDFW (NAWS China Lake, pp. 112–113). Additionally, the INRMP for NAWS China Lake has an ecosystem approach that includes conservation of water resources, control of exotic species, and other activities that benefit the towhee and its habitat (NAWS China Lake, entire).

Through implementation of the INRMP, NAWS China Lake has made significant contributions to recovery of the Inyo California towhee, such as reduction of impacts to habitat by initiating management prescriptions that eliminate feral equines from riparian areas. The NAWS China Lake is currently working to update their INRMP, which includes continuation of management of feral equines, fencing of springs as needed, and other activities that benefit the towhee. Additionally, as an active military installation, the NAWS China Lake is closed to most public uses (Pennix 2006, pers. comm.).

The Federal Land Policy and Management Act of 1976 (FLPMA) is the primary Federal law governing most land uses on BLM land, which constitutes about 26 percent of the range of the Inyo California towhee. FLPMA established a public land policy for the BLM; it provides for the management, protection, development, and enhancement of the BLM lands. FLPMA directs the development and implementation of resource management plans (RMPs), which

direct management at a local level, and requires public notice and participation in the formulation of such plans and programs for the management of BLM lands. RMPs authorize and establish allowable resource uses, resource condition goals and objectives to be attained, program constraints, general management practices and sequences, intervals and standards for monitoring and evaluating RMPs to determine effectiveness, and the need for amendment or revision (43 CFR 1601.0–5(n)).

Through FLPMA in 1976, Congress designated 25 million acres as the California Desert Conservation Area (CDCA) (Sec 601 (c)), of which approximately half (12 million acres) is BLM property, and includes the entire range of the Inyo California towhee. Congress noted the fragility of the California desert ecosystem that is “easily scarred and slow to heal; the historical, scenic, archeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources in the California desert; and that certain rare and endangered species of wildlife, plants, and fishes, and numerous archeological and historic sites, are seriously threatened by air pollution, inadequate Federal management authority, and pressures of increased use, particularly recreational use, which are certain to intensify because of the rapidly growing population of southern California.”

Congress charged the BLM with developing and implementing an RMP for the CDCA that provides for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple-use and sustained yield, and the maintenance of environmental quality. Within the range of the Inyo California towhee, the current BLM land management documents are the California Desert Conservation Area (CDCA)

Plan 1980, as amended (BLM 1999) and other amendments to the CDCA Plan, including the West Mojave RMP (WEMO Plan) and EIS (BLM *et al.* 2005) and the Northern and Eastern Mojave RMP (NEMO) and EIS (BLM *et al.* 2002). WEMO and NEMO management areas, whose boundaries encompass the range of the Inyo California towhee, are two of six planning areas within the CDCA. Typically, RMPs are updated every 30 years, but may be done updated or less frequently. The overarching CDCA Plan defined elements, such as Wildlife Elements, which have specific goals (BLM 1999, p. 21).

Further, BLM designated Areas of Critical Environmental Concern (ACEC) as a tool to meet goals of the Wildlife Element of the CDCA Plan. The FLPMA defined ACECs as “areas within the public lands where special management attention is required ... to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards” (Sec. 103 (a)). The CDCA Plan states that management prescriptions for ACECs for identified wildlife resources will include aggressive management actions to halt reverse declining trends and to ensure the long-term maintenance of wildlife resources (BLM 1999, p. 29). Recognizing the significance of the Inyo California towhee, the BLM established the 9000-acre Great Falls Basin/Argus Range ACEC, primarily to benefit the Inyo California towhee, with the goals of protecting and enhancing the towhee’s habitat and protecting scenic resources (BLM 1987, pp. 4, 9). In the development and revision of land-use plans, the BLM is to “give priority to the designation and protection of areas of critical environmental concern” (Sec. 202 (c)(3)).

In 1964, Congress enacted the Wilderness Act with the intent of establishing a National

Wilderness Preservation System composed of federally owned wilderness areas to be protected in their natural condition for the use and enjoyment of the people of the United States. As originally enacted, the Wilderness Act directed only the Secretary of Agriculture to identify areas suitable for wilderness in the National Forests. In FLPMA, Congress directed the Secretary of the Interior to identify areas suitable for wilderness on BLM lands. The 65,000-acre Argus Range Wilderness Area owned by BLM was designated in 1994 and includes a portion of the Inyo California towhee's range.

Biological resources in designated wilderness areas are afforded the highest level of protection due to restriction on uses. The general management goals that apply to wilderness areas require that the BLM provide for and manage wilderness areas for long-term protection and preservation of wilderness, scenic, cultural, and natural characteristics for recreational, scientific, and educational purposes. To maintain the primeval character and provide for solitude, a variety of activities are prohibited by the Wilderness Act within designated wilderness areas. Some of the activities not allowed in wilderness areas include building roads and structures, commercial activities, use of motorized vehicles or equipment (including OHVs), and landing of aircraft.

In 1994, the State of California purchased Indian Joe Canyon, which was the only parcel of Inyo California towhee critical habitat under private ownership (Service 1998, p. 14). The area around Indian Joe Springs includes about 5 percent of the range of the Inyo California towhee. Under the State of California's Ecological Reserve Act of 1968, CDFW designated the acquired land as the Indian Joe Springs Ecological Reserve to protect the towhee and its habitat. Ecological Reserves are managed under the California Code of Regulations (CCR), Title 14,

Section 630. The purpose of ecological reserves is “to provide protection for rare, threatened or endangered native plants, wildlife, aquatic organism and specialized terrestrial or aquatic habitat types.” (14 CCR 630) Under 14 CCR 630(a)(1), it is prohibited in any Ecological Reserve to “take or disturb any bird or nest, or eggs thereof, or any plant, mammal, fish, mollusk, crustacean, amphibian, reptile, or any other form of plant or animal life.” Therefore, this Ecological Reserve is to be managed consistent with the needs of the towhee, including restriction of activities that negatively impact the towhee or its habitat.

All Federal agencies are required to adhere to the National Environmental Policy Act of 1970 (NEPA; 42 U.S.C. 4321 *et seq.*) for projects they fund, authorize, or carry out. The Council on Environmental Quality’s regulations for implementing NEPA (40 CFR parts 1500–1518) state that agencies shall include a discussion on the environmental impacts of the various project alternatives (including the proposed action), any adverse environmental effects that cannot be avoided, and any irreversible or irretrievable commitments of resources involved (40 CFR 1502). NEPA does not itself regulate activities that might affect the Inyo California towhee, but it does require full evaluation and disclosure of information regarding the effects of contemplated Federal actions on sensitive species and their habitats. Although Federal agencies may include conservation measures for Inyo California towhee as a result of the NEPA process, any such measures are typically voluntary in nature and are not required by the statute.

The inadequacy of existing regulatory mechanisms was not indicated as a threat to the Inyo California towhee at listing. Because more than 99 percent of the range of the towhee is under Federal or State ownership, existing regulatory mechanisms, including various laws,

regulations, and policies administered by the U.S. Government and CDFW, aid in abating known threats and provide protective mechanisms for the species and its habitat. Primary laws that provide some benefit for the species and its habitat include the CESA, MBTA, Sikes Act, FLPMA, Wilderness Act, and NEPA. While most of these laws, regulations, and policies are not specifically directed toward protection of towhee, they mandate consideration, management, and protection of resources that benefit towhees. Additionally, these laws contribute to and provide mechanisms for agency planning and implementation directed specifically toward management of towhees and their habitat. Because most of these laws and regulations are national in scope and are not conditional on the listed status of the towhee, we expect these laws and regulatory mechanisms to remain in place after the towhee is delisted. Therefore, the inadequacy of existing regulatory mechanisms is not a threat to Inyo California towhee now or in the future.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

We did not identify any threats to the Inyo California towhee under Factor E in the final listing rule (52 FR 28780). However, natural and manmade disturbances, such as flooding, erosion, and fires, may result in the temporary loss or reduction of suitable habitat for the Inyo California towhee in some areas, which could result in adverse effects to the species. Because the potential effects to the towhee are due to habitat loss or destruction, these are discussed under Factor A. We conclude there are no natural or manmade factors that are a threat to Inyo California towhee now or in the future.

Conclusion of 5-Factor Analysis

The reasons for the population decline of the Inyo California towhee and its listing as threatened were habitat loss and degradation from feral grazers, recreational use, water diversion, and mining. New potential threats identified since the time of listing include invasive and nonnative plants, climate change, nest parasitism by brown-headed cowbirds and predation by common ravens. Although invasive and nonnative plants and brown-headed cowbirds and common ravens have been documented in Inyo California towhee habitat, the best available information does not support that they are having a negative impact on the species. Climate change may have some effect on the species. However, at this time, the best available information does not indicate that climate change is a threat to this species.

Although none of the factors discussed above is having a major impact on the towhee, a combination of factors could potentially have a much greater effect. For example, effects of feral equines on towhee habitat could worsen during periods of prolonged, severe drought when some water sources may dry up, resulting in greater pressure from feral equines on the remaining available water sources, which would likely degrade towhee habitat. However, the impacts of feral equines on towhee habitat can be greatly reduced or eliminated by installing fencing around springs. Almost the entire range of the towhee is under Federal and State ownership, and the BLM, NAWS China Lake, and CDFW have committed to controlling the number of feral equines and protecting towhee habitat with fences as needed in the 2010 cooperative management agreement (Service *et al.*, 2010, entire). Although the types, magnitude, or extent of cumulative impacts are difficult to predict, we are not aware of any combination of factors that has not already or would not be addressed through ongoing conservation measures.

As stated previously, NAWS China Lake and BLM own about 94 percent of the towhee's range. Conservation measures implemented by the NAWS China Lake and BLM to reduce or eliminate grazing, recreational use, water diversions, and mining throughout most of the towhee's range have improved the habitat of the towhee, which in turn, has led to a substantial increase in towhee abundance. Since 1980, the NAWS China Lake and BLM have removed more than 9,400 feral equines and have fenced 17 springs occupied by towhees to exclude equines. The NAWS China Lake is closed to the public, and the BLM has reduced recreational impacts on its land through fencing of springs (LaBerteaux 2004, p. 47). In 2007 and 2011, water diversions were occurring at approximately only 1 percent of the sites included in the surveys (LaBerteaux 2011, p. 15). The NAWS China Lake is closed to mining, and all mines on BLM land have been relinquished. These conservation measures have been highly effective in the recovery and protection of the towhee's riparian habitat and have resulted in a major increase in towhee abundance, from less than 200 at the time of listing (52 FR 28780) to a total population that, since 1998, has ranged from 640 to 741 individuals (LaBerteaux and Garlinger 1998, pp. ii, 7, 63; LaBerteaux 2004, pp. ii, 60; LaBerteaux 2008, pp. iii, 85; LaBerteaux 2011, pp. 3, 12). The towhee and its habitat are expected to continue to be protected through ongoing conservation measures, laws, and regulations. The NAWS China Lake, BLM, and CDFW own approximately 99 percent of the towhee's range. Multiple regulations provide protection for Inyo California towhee, and additionally, these agencies have entered into a cooperative management agreement with the Service to continue conducting conservation measures after the towhee is delisted (Service *et al.* 2010, entire).

As discussed above, survey results indicate that over the last 13 years the number of Inyo California towhees have been stable to increasing and that the population is self-sustaining, which meets one of the criterion for recovery outlined in the Recovery Plan. In addition, an assessment of factors that may be impacting the species did not reveal any significant threats to the species, now or in the future. We have carefully assessed the best scientific and commercial data available and determined that Inyo California towhee is no longer in danger of extinction throughout all of its range, nor is it likely to become so in the future.

Significant Portion of the Range Analysis

Having determined that the towhee does not meet the definition of threatened throughout its range, we next consider whether there are any significant portions of its range that are in danger of becoming endangered in the foreseeable future or becoming extinct. The range of a species can theoretically be divided into portions in an infinite number of ways. However, there is no purpose in analyzing portions of the range that have no reasonable potential to be significant or in analyzing portions of the range in which there is no reasonable potential for the species to be endangered or threatened. To identify only those portions that warrant further consideration, we determine whether there is substantial information indicating that: (1) The portions may be “significant” *and* (2) the species may be in danger of extinction there or likely to become so within the foreseeable future. Depending on the biology of the species, its range, and the threats it faces, it might be more efficient for us to address the significance question first or the status question first. Thus, if we determine that a portion of the range is not “significant,” we do not need to determine whether the species is endangered or threatened there; if we determine

that the species is not endangered or threatened in a portion of its range, we do not need to determine if that portion is “significant.” In practice, a key part of the determination that a species is in danger of extinction in a significant portion of its range is whether the threats are geographically concentrated in some way. If the threats to the species are essentially uniform throughout its range, no portion is likely to warrant further consideration. Moreover, if any concentration of threats to the species occurs only in portions of the species’ range that clearly would not meet the biologically based definition of “significant,” such portions will not warrant further consideration.

Applying the process described above, we evaluated the range of the Inyo California towhee to determine if any area could be considered a significant portion of its range. As noted above in our Species Information section, the Inyo California towhee is considered to currently occupy its entire historical range, so there has been no loss of historic range for this species. We consider the “range” of the Inyo California towhee to be the southern Argus Mountains in the Mojave Desert, Inyo County, California. We considered whether any portions of the range of the Inyo California towhee were likely to be both significant and in danger of extinction or likely to become so. One possible way to identify portions would be to consider land ownership because conservation actions, and, therefore, management of threats, could potentially differ depending on the policies and regulations implemented by the land owner. As noted earlier, 68 percent of the towhee’s range is on Navy land, 26 percent is on BLM land, 5 percent is on CDFW land, and less than 1 percent is on private property. Potentially, the portions of the towhee’s range on Navy and BLM land could be significant because of the size of those portions. However, while these lands are managed by different agencies with different laws and policies governing

management practices, there is no substantial difference in the conservation actions implemented to control threats or the status of the species among the differing land ownerships.

We also considered whether any threats are geographically concentrated in some way that would indicate the species could be threatened or endangered in that area. The major threats to the Inyo California towhee at the time of listing were the loss and degradation of riparian habitat attributed to feral equines, recreational activities, water diversion, and mining. As noted above, feral equines still occur throughout the range of the towhee, and have the potential to adversely affect all towhee habitat. However, feral equines are being adequately managed throughout the range of the species, and no portion of the species range is experiencing an increased level of impacts from feral equines. Recreational activities are excluded from the NAWS China Lake because it is closed to the public; impacts on the towhee's habitat from recreational activities primarily occur on BLM and CDFW lands but are subject to management and restrictions and are considered to be occurring at low levels at a limited number of sites. This level of recreational activity does not appear to be having an impact on towhees and their habitat. Water diversion and mining were also more prevalent on BLM lands historically, but are now eliminated or reduced to negligible levels.

As we explained in detail in our analysis of the status of the species, all major threats (feral equines, recreational activities, water diversions, and mining) have been reduced across the range of the species, and the towhee population has rebounded. Another way to identify portions would be to identify natural divisions within the range that might be of biological or conservation importance. The range of the Inyo California towhee is small, but may be naturally

divided by streams or watershed. However, given their patchy distribution and ability of the species to fly across land barriers, no area is likely to be of greater biological or conservation importance than any other area. We did not find that any portion of the species range has a concentration of threats or that any natural divisions in the range exist that would indicate any portion is of greater conservation importance than others and, therefore, conclude that no portion warrants further consideration. Therefore, based on our evaluation of the current and potential threats to the Inyo California towhee, we conclude that these threats are neither sufficiently concentrated nor of sufficient magnitude to indicate the species is in danger of extinction or likely to become so in any of the areas that support the species, and thus, it is likely to persist throughout its historical range.

We have carefully assessed the best scientific and commercial data available and determined that the Inyo California towhee is no longer in danger of extinction throughout all or significant portions of its range, nor is it likely to become so in the future. As a consequence of this determination, we are proposing to remove this species from the List of Endangered and Threatened Species under the Act.

Effects of This Rule

This proposal, if made final, would revise 50 CFR 17.11(h) to remove the Inyo California towhee from the List of Endangered and Threatened Wildlife and would revise 50 CFR 17.95(b) to remove designated critical habitat for the species. The prohibitions and conservation measures provided by the Act, particularly through sections 7 and 9, would no longer apply to this species.

Federal agencies would no longer be required to consult with the Service under section 7 of the Act in the event that activities they authorize, fund, or carry out may affect the Inyo California towhee.

Other regulatory mechanisms will remain in place after delisting that will continue to ensure that future impacts will be reduced or minimized, including the protective provisions of: the California Endangered Species Act of 1984 (CESA; California Fish and Game Code, section 2080 *et seq.*), the Migratory Bird Treaty Act of 1918 (MBTA; 16 U.S.C. 703–711; 40 Stat. 755), the Sikes Act (16 U.S.C. 670), the Federal Land Policy and Management Act of 1976 (FLPMA; 43 U.S.C. 1701 *et seq.*), and the Wilderness Act of 1964 (16 U.S.C. 1131–1136, 78 Stat. 890). These protections, taken together, will provide adequate regulatory mechanisms to prevent the Inyo California towhee from becoming endangered throughout all of its range in the foreseeable future after it is removed from the Federal List of Endangered and Threatened Wildlife.

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (50 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule and the draft post-delisting monitoring (PDM) plan. The purpose of peer review is to ensure that decisions are based on scientifically sound data, assumptions, and analyses. We have invited these peer reviewers to comment during this comment period on this proposed rule and draft PDM plan, and the specific assumptions and

conclusions regarding the proposed delisting. Accordingly, the final decision may differ from this proposal.

Post-Delisting Monitoring Plan

Section 4(g)(1) of the Act requires us, in cooperation with the States, to implement a monitoring program for not less than 5 years for all species that have been recovered and delisted (50 CFR 17.11, 17.12). The purpose of this post-delisting monitoring (PDM) is to verify that a species remains secure from risk of extinction after it has been removed from the protections of the Act. The PDM is designed to detect the failure of any delisted species to sustain itself without the protective measures provided by the Act. If, at any time during the monitoring period, data indicate that protective status under the Act should be reinstated, we can initiate listing procedures, including, if appropriate, emergency listing under section 4(b)(7) of the Act. Section 4(g) of the Act explicitly requires us to cooperate with the States in development and implementation of PDM programs, but we remain responsible for compliance with section 4(g) and, therefore, must remain actively engaged in all phases of PDM. We also seek active participation of other entities that are expected to assume responsibilities for the species' conservation post-delisting.

Post-Delisting Monitoring Plan Overview

The Service has developed a draft PDM plan for the Inyo California towhee. The PDM plan is designed to verify that the towhee remains secure from risk of extinction after removal

from the Federal List of Endangered and Threatened Wildlife by detecting changes in its status and habitat throughout its known range. The PDM plan would accomplish the objectives through cooperation with the NAWA China Lake, BLM, and CDFW, thus fulfilling the goal to prevent the species from needing Federal protection once again, per the Act. The following briefly describes the measures in the draft PDM plan that will be implemented during the monitoring period. These measures are discussed in more detail in the draft PDM plan.

Although the Act has a minimum PDM requirement of 5 years, the Inyo California towhee should be monitored for 12 years following delisting. A 12-year monitoring period is necessary to account for environmental variability (e.g., drought) that may affect the condition of riparian habitat and to provide for a sufficient number of surveys to document any changes in the abundance of the species. Based on the frequency of past surveys, a complete survey of known and potential towhee habitat should be conducted every 4 years. The abundance surveys should continue to be accompanied by habitat and threats surveys, as in previous years. Therefore, the 12-year monitoring period will result in a minimum of three complete surveys of the towhee's abundance, habitat condition, and threats in its known and potential range during the period of the PDM plan. However, if a decline in abundance is observed or a substantial new threat arises, post-delisting monitoring may be extended or modified as described below.

Abundance for the duration of the post-delisting monitoring period will be determined using the same survey methodology developed by LaBerteaux and Garlinger (1998), which has been used for all Inyo California towhee surveys conducted on Federal and State lands beginning with the 1998 survey. This methodology will be used because it is effective at detecting towhees

and provides an accurate population estimate. Additionally, use of this methodology will maintain consistency between data sets and allow for comparison with previous population estimates. Observations from those sites visited in a single season are compared with those made at the same sites in previous years to determine any change or trend in towhee abundance. At the end of each complete survey, all observations will be used to estimate the total number of birds, number of breeding pairs, and number of unmated birds across the range of the species.

In addition to the survey methodology for determining towhee abundance, LaBerteaux and Garlinger (1998) also developed a methodology for assessing habitat condition and threats. These surveys will continue to be conducted throughout the 12-year post-delisting monitoring period to maintain consistency between data sets and allow for comparison with previous surveys. Data from these surveys will be used to calculate the percent change in the number of affected sites from the previous survey.

After each survey, the Service and its partners will compare the results with those from previous surveys and consider the implication of any observed change in abundance or threats to the conservation of the species. At the end of the PDM period, the Service will conduct a final internal review and prepare a final report summarizing the results of monitoring. The final report will include a discussion of whether monitoring should continue beyond the 12-year period for any reason.

With this notice, we are soliciting public comments and peer review on the draft PDM Plan including its objectives and procedures (see **Public Comments Solicited**). All comments on the draft PDM plan from the public and peer reviewers will be considered and incorporated

into the final PDM plan as appropriate. The draft PDM plan will be posted on our Endangered Species Program's national web page (<http://endangered.fws.gov>) and the Ventura Fish and Wildlife Office web page (<http://fws.gov/ventura>) and on the Federal eRulemaking Portal at <http://www.regulations.gov>. We anticipate finalizing this plan, considering all public and peer review comments, prior to making a final determination on the proposed delisting rule.

Although separate from the cooperative management agreement with NAWS China Lake, BLM, and CDFW, many of the actions in the PDM plan are consistent with those committed to in the agreement.

Required Determinations

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized,
- (b) Use the active voice to address readers directly,
- (c) Use clear language rather than jargon,
- (d) Be divided into short sections and sentences, and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the

methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the names of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Paperwork Reduction Act of 1995

Office of Management and Budget (OMB) regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), require that Federal agencies obtain approval from OMB before collecting information from the public. This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

We determined that we do not need to prepare an Environmental Assessment or an Environmental Impact Statement, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship with Tribes

In concurrence with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. We have determined that there are no tribal lands affected by this proposal.

References Cited

A complete list of all references cited in this rule is available on the Internet at <http://regulations.gov> or upon request from the Field Supervisor, Ventura Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** section).

Author

The primary author of this proposed rule is the Ventura Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

§ 17.11 [Amended]

2. Amend § 17.11(h) by removing the entry for “Towhee, Inyo California” under “Birds” in the List of Endangered and Threatened Wildlife.

§ 17.95 [Amended]

3. Amend § 17.95(b) by removing the entry for “Inyo Brown Towhee (*Pipilo Fuscus Eremophilus*)”.

Dated: October 23, 2013

Signed: Stephen Guertin

Acting Director, U.S. Fish and Wildlife Service

Billing Code 4310-55

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